SPECIFICATION

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3 TITLE: NECTARINE TREE NAMED 'SPRING PEARL'

4 INVENTOR: Lowell Glen Bradford

5 ADDRESS: 12439 E. Savana Road

6 Le Grand, California 95333

7 BOTANICAL CLASSIFICATION: Prunus persica.

8 VARIETY DENOMINATION: 'SPRING PEARL'

BACKGROUND OF THE VARIETY

10 In a continuing effort to improve the quality of shipping 11 fruits, I, the inventor, typically hybridize a large number of peach, 12 nectarine, plum, apricot, and cherry seedlings each year. I also grow a 13 lesser number of open pollinated seeds of each of these fruits, usually 14 to capture recessive traits. The present invention relates to a new and 15 distinct variety of nectarine tree, which has been denominated varietally as 'SPRING PEARL'. During the spring and summer of 1997 I gathered fruit 16 from several different unnamed seedlings in my experimental orchard 17 located near Le Grand, California, in Merced County (San Joaquin Valley). 18 19 One particular group of nectarines were white in flesh color, clingstone 20 in type, and sub-acidic in flavor, and were thus designated as "WNC 21 The seeds from this fruit were removed, cracked, stratified, 22 germinated and grown as seedlings on their own root in my greenhouse, and 23 upon reaching dormancy transplanted to a cultivated area in the 24 experimental orchard described above. During the fruit evaluation season 25 of 2000 I selected several nectarines that exhibited desirable qualities,

1 as the present variety was selected as a single tree from the group of

2 "WNC (OP)" described above. Subsequent to origination of the present

3 variety of nectarine tree, I asexually reproduced it by budding and

4 grafting in the experimental orchard described above, and such

5 reproduction of plant and fruit characteristics were true to the original

6 plant in all respects. The reproduction of the variety included the use

7 of 'Nemaguard' rootstock (unpatented) upon which the present variety was

8 compatible and true to type.

The present variety is most similar to 'June Pearl' (United States Plant Patent Number 9,360) nectarine, by producing nectarines that are very firm in texture, sub-acidic and sweet in flavor, clingstone in type, and nearly full red in skin color, but is distinguished therefrom by producing fruit that is more globose in shape, has virtually no protruding tips at the apex, is larger in size, and matures about five days later.

SUMMARY OF VARIETY

17 In summary, the present variety is characterized by a medium 18 size, vigorous, hardy, self-fertile, productive and regular bearing tree. 19 The fruit matures under the ecological conditions described approximately 20 the third week in June, with first picking on June 21, 2003. The fruit 21 is uniformly large in size, excellent in flavor, globose in shape, 22 clingstone in type, very firm in texture, white in flesh color, and red 23 in skin color. The variety was developed as an open pollinated seedling 24 from an unnamed white flesh nectarine.

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1 DRAWING

2 The accompanying photograph exhibits four whole fruits 3 positioned to display the characteristics of the skin color and form, one 4 fruit divided transversely to the suture plane to reveal the flesh and

5 stone, and typical leaves.

6

POMOLOGICAL CHARACTERISTICS

7 Referring now more specifically to the pomological characteristics of this new and distinct variety of nectarine tree, the 8 9 following has been observed under the ecological conditions prevailing 10 near Le Grand, Merced County (San Joaquin Valley), California, and was 11 developed at the state of firm ripe on June 25, 2003, on the original tree during its sixth growing season. All major color code designations 12 are by reference to the Inter-Society Color Council, National Bureau of 13 Standards. Common color names are also used occasionally. 14

15 Tree

- 16 Size: Medium, reaching a height of 11' [3.35 m.] and a spread of 10'
- 17 [3.05 m.] after six growing seasons utilizing typical dormant
- 18 pruning.
- 19 Vigor: Vigorous, responding typically to irrigation and fertilization.
- The variety grows about 3' [0.91 m.] of surplus top-growth
- 21 during the spring and summer. The plant should be grown on a
- 22 standard commercial rootstock for production purposes.
- 23 Growth: Spreading and dense.
- 24 Form: Vase formed.
- 25 Hardiness: Hardy with respect to central California winters.

California climatic conditions, which typically include 2 3 extended periods of heat. Drought Tolerance: Variety is developed for commercial orchards and 4 5 requires regular irrigation. 6 Production: Productive, thinning necessary. 7 Fertility: Self-fertile. 8 Bearing: Regular bearer with no alternate bearing yet observed. Trunk: Size. - Medium, with a maximum diameter of 3 3/4" [95 mm.] 10 11 after the sixth growing season. 12 Texture. - Somewhat shaggy. Bark Color. - A two-tone variegation of Dark grayish yellowish 13 brown [81. d.gy.yBr] and Dark brown [59. d.Br]. 14 Lenticels. - Approximate Number Per Square Inch: 10. 15 Color: Brownish orange [54. br0]. 16 Typical Size: 1/8" to 7/16" [3.2 - 11.1 mm.]. 17 Branches: Size.- Diameter of limb is 1 1/2" [38 mm.] measured 12" 18 19 above the secondary fork, typical of Prunus persica, and dependent upon cultural practices and climatic 20 21 conditions. Texture. - Smooth on 1st year wood, increasing roughness 22 23 with age. Color. - 1st Year Wood Topside: Moderate red [15. m.R]. 24

Heat Tolerance: Observed to perform adequately in typical central

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1st Year Wood Underside: Brilliant yellow green

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1
                                                     [116. brill.YG].
 2
                         Older Wood: Deep yellowish brown [75. deep yBr].
 3
                 Lenticels. - Approximate Number Per Square Inch: 100.
 4
                             Color: Moderate orange [53. m.O].
 5
                             Typical size: 1/32" to 1/8" [0.8 - 3.2 mm.].
 6
     Leaves: Size. - Medium.
 7
                      Average Length: 5 5/8" [143 mm.].
                      Average width: 1 1/2" [38 mm.].
 9
               Arrangement. - Alternate.
10
               Thickness. - Medium.
               Form. - Elliptical.
11
12
              Apex. - Acuminate.
               Base. - Acute, with an average base angle of 80 degrees.
13
               Surface. - Smooth.
14
15
               Color. - Dorsal Surface: Moderate olive green [125. m.OlG].
                       Ventral Surface: Moderate yellow green [120. m.YG].
16
17
              Margin. - Finely serrate.
18
               Venation .- Pinnately net veined.
               Petiole. - Average Length: 1/2" [12.7 mm.].
19
20
                         Average Thickness: 1/16" [1.6 mm.].
                         Color: Brilliant yellow green [116. brill.YG].
21
               Stipules. - Number: 2 per leaf, up to 6 per growing tip.
22
23
                          Average Length: 7/16" [11.1 mm.].
24
              Color: Strong yellow green [117. s.YG] when young, becoming
25
                       light reddish brown [42. l.rBr] with age.
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1	Glands Average number: 4.
2	Position: Mostly alternate, first two on petiole, rest
3	on base of blade.
4	Size: Medium.
5	Form: Reniform.
6	Color: Brilliant yellow green [116. brill.YG] when
7	young, acquiring a Moderate reddish orange
8	[37. m.rO] center with age.
9	Leaf Buds Conic.
10	Flower Buds:
11	Hardiness Hardy, with respect to central California winters.
12	Diameter Typically 9/16" [14.3 mm.] 1 day before bloom.
13	Length Typically 15/16" [23.8 mm.] 1 day before bloom.
14	Form Not appressed.
15	Surface Pubescent.
16	Color Strong purplish red [255. s.pR] when tip is first
17	exposed, Light purplish pink [249. l.pPk] just before
18	bloom.
19	Flowers: Perfect, complete, perigynous, usually a single pistil,
20	typically thirty or more stamens, five sepals and petal
21	locations alternately positioned.
22	Type Showy, large.
23	Average Flower Diameter 1 13/16" [46.0 mm.].
24	Number of Petals Mostly five, but about ten percent are
25	double blossoms and many possess extra

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1
                                     smaller petals.
                 Petal Shape. - Circular.
 2
 3
                 Petal Margin. - Somewhat wavy.
                 Average Petal Diameter. - 3/4" [19.1 mm.].
                 Average Petal Length. - 13/16" [20.6 mm.].
 5
 6
                 Petal Apex. - Rounded with a small notch located at the top
 7
                               center of the margin on many.
                 Petal Base. - Rounded.
 8
                 Petal Color. - Light purplish pink [249. 1.pPk].
 9
10
                 Anther Color. - Dark red [16. d.R] over a Brilliant orange
11
                                 yellow [67. brill.OY] center.
                 Stigma Color. - Light greenish yellow [101. 1.gY].
12
                 Sepal Color. - Dark purplish red [259. d.pR].
13
14
                 Sepal Length. - 1/4" [6.4 mm.].
                 Sepal Width. - 11/64" [4.4 mm.].
15
                 Average Pistil Length. - 3/4" [19.1 mm.].
16
                 Average Stamen Length. - 5/8" [15.9 mm.].
17
                 Fragrance. - Moderate when nectar is present.
18
19
                 Blooming Period. - Medium compared with other varieties.
20
                 Onset of Bloom. - One percent on March 3, 2003.
                 Date of Full Bloom. - March 10, 2003.
21
22
                 Duration of Bloom. - One to two weeks, dependent on ambient
23
                                      temperature.
24
                 Number per cluster. - 1 to 3 with single flowers most common.
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- 1 FRUIT
- 2 Maturity When Described: Firm ripe, June 25, 2003.
- 3 Date of First Picking: June 21, 2003.
- 4 Date of Last Picking: June 30, 2003.
- 5 Size: Uniform, large.
- 6 Average Diameter Axially.- 2 9/16" [65.1 mm.].
- 7 Average Diameter Across Suture Plane. 2 5/8" [66.7 mm.].
- 8 Typical Weight. 6.8 ounces [193 grams].
- 9 Form: Uniform, globose.
- 10 Longitudinal Section Form. Circular.
- 11 Transverse Section Through Diameter. Circular.
- 12 Suture: A visible groove extending from the base well beyond the apex,
- sharp near the base, shallow along the side, and deep and
- 14 somewhat sharp toward the apex.
- 15 Ventral Surface: Rounded, lipped throughout on both sides.
- 16 Lips: Somewhat unequal.
- 17 <u>Cavity:</u> Flaring, elongated in the suture plane, suture showing on one
- 18 side, and Greenish white [153. gWhite] stem markings typical.
- 19 Depth.- 7/16" [11.1 mm.].
- 20 Breadth.- 7/8" [22.2 mm.].
- 21 Base: Truncate.
- 22 Apex: Rounded and somewhat emarginate if viewed along the suture.
- 23 Pistil Point: Some oblique and some apical, negligible in length,
- 24 depressed within the suture.
- 25 Stem: Medium.

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Average Width.- 3/16" [4.8 mm.].
 2
 3
     Skin:
 4
             Thickness. - Medium.
 5
            Surface. - Smooth.
 6
             Tenacity. - Tenacious to flesh.
 7
            Astringency. - Nonastringent.
 8
             Tendency to Crack .- None observed in dry season.
             Color. - Very dark red [17. v.d.R] over a Moderate red [15. m.R]
 9
10
                     background with a minor amount of Light yellowish brown
11
                     [76. l.yBr] freckling toward the apex and some very small
12
                     Light yellow green [119. l.YG] areas in the stem cavity
                     where sunlight deprived.
13
14
     Flesh: Color.- White [263. White] to Greenish white [153. gWhite] toward
15
                      the stone with occasional Moderate red [15. m.R] flecking
16
                      toward the skin when reaching past maturity.
17
              Surface of Pit Cavity. - Greenish white [153. gWhite] fibers
18
                                      breaking when twisted from the stone.
              Amygdalin.- Scarce.
19
20
              Juice .- Abundant, rich.
21
              Texture. - Firm and very crisp.
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Average Length. - 3/8" [9.5 mm.].

Fibers. - Abundant, fine.

Aroma. - Slight.

Ripens. - Slightly earlier toward the apex.

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Flavor. - Mildly sub-acidic and sweet, averaging 17 brix.

- 1 Eating Quality. Very Good.
- 2 STONE
- 3 Type: Clingstone.
- 4 Form: Oval.
- 5 Hilum: Oval.
- 6 Base: Fairly straight.
- 7 Apex: Rounded to cuneate with a slightly protruding tip and an average
- 8 tip angle of 90 degrees.
- 9 Sides: Equal.
- 10 Surface: Irregularly furrowed near the apex and pitted toward the base.
- 11 Ridges: Jagged toward the base.
- 12 External Color: Light orange [52. 1.0] when freshly exposed.
- 13 Pit Wall Color When Cracked: Pale orange yellow [73. p.OY].
- 14 <u>Internal Cavity Color:</u> Light yellowish brown [76. l.yBr].
- 15 Average Pit Wall Thickness: 1/4" [6.4 mm.].
- 16 <u>Average Width:</u> 1 1/16" [27.0 mm.].
- 17 Average Length: 1 9/16" [39.7 mm.].
- 18 Average Breadth: 13/16" [20.6 mm.].
- 19 Tendency To Split: Slight.
- 20 Kernel:
- 21 Form.- Oval.
- 22 Pellicle Color. Light grayish yellowish brown [79. l.gy.yBr].
- 23 Skin Color. Pale yellow [89. p.Y] when first cracked.
- Vein Color. Pale orange yellow [73. p.OY].
- 25 Taste.- Bitter.
- 26 Viable. Yes.

1	Average Width 1/2" [12.7 mm.].
2	Average Length 13/16" [20.6 mm.].
3	Amygdalin Abundant.
4	USE
5	Market: Fresh market and long distance shipping.
6	Keeping Quality: Good. Fruit quality observed to remain in good
7	condition in after 14 days in standard cold room at
8	36° Fahrenheit [2° Celsius].
9	Shipping Quality: Good.
10	Resistance To Insects: No unusual susceptibilities noted.
11	Resistance To Diseases: No unusual susceptibilities noted.
12	Other Notes
13	Although the new variety of nectarine tree possesses the
14	described characteristics under the ecological conditions at Le Grand,
15	California, in the central part of the San Joaquin Valley, it is to be
16	expected that variations in these characteristics may occur when farmed
17	in areas with different climatic conditions, different soil types, and/or
18	varying cultural practices.
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